

# EXHIBIT B

Sussex-McDaniel P&H

Page No. 1



Analysis of Impacts to the Performance of  
**McDaniel Plumbing & Heating, Incorporated**

*On the*  
Construction of the Sussex Central High School  
*For the*  
Indian River School District

Report Date: July 30<sup>th</sup>, 2007

**Progressive Construction Management, Inc.**  
Construction Scheduling, Claims and Management Consulting  
300 East Spencer Lane, Galloway, New Jersey 08205  
Phone 609 404 1684 Fax 404 1685 Email PCMCASSIN@MSN.COM

**NARRATIVE OUTLINE**

On May 10<sup>th</sup>, 2002 the Indian River School District, in an internal memorandum, noted their retention of EDiS Company to provide construction management services for the upcoming construction of the Sussex Central High School project. The contract, dated January 7<sup>th</sup>, 2002, totaling \$1,192,000, incorporated 32 months of performance duration to supervise design and construction phases for the 187,225 SF facility. The memorandum notes that EDiS Company had been working without compensation since January and that the payment structure would start from that date.

Albeit the fact that the EDiS contract envisioned performance of pre construction services, the specific period for construction, as referenced in their contract, was from a commencement on July 15<sup>th</sup> 2002 to a substantial completion on May 21<sup>st</sup>, 2004, and a final on September 2<sup>nd</sup>, 2004, or a gross duration of twenty six and a half months for overall construction.

Subsequent to the issuance of EDiS's contract, on the 17<sup>th</sup> of July 2002 EDiS transmitted the following notices to proceed:

NDK Gen Contr, Inc.	Concrete	\$898,000
A P Croll & Son	Site Work	\$2,169,500
Murphy Steel	Struct Stl & Misc Metals	\$1,445,000

On August 15<sup>th</sup>, 2002 the Indian River School District received prime bid for the mechanical, plumbing and automatic temperature control construction scope for the new Central High School in Millsboro, Delaware, Sussex County.

The bids were compiled by the District's Construction Manager, EDiS Company, and their Architect Becker Morgan Group, Inc. and submitted on August 22<sup>nd</sup>, 2002. The following is the abstract of the Mechanical & Plumbing Bid:

Bidders	Base	Alt 1	Alt 2	Alt 3
McDaniel P&H	4,289,000	33,000	4,500	9,000
Delcard Associates	4,516,000	72,000	10,000	23,000
J D Griffith	4,826,000	79,500	6,500	17,000
Joseph Zimmer	4,849,000	93,000	13,000	39,000

McDaniel Plumbing & Heating of New Castle, Delaware bid, and was apparent low bidder for, the contract SC-B-14 "Mechanical, Plumbing, Automatic Temperature Control", and on the 28<sup>th</sup> of August 2002, was notified by the School District that their bid of \$4,335,500 (\$4,289,000 Base, + \$33,000 for Alt 1 Aux Gym + \$4,500 for Alt # 2 Storage Area + \$9,000 for Alt #3 Classrooms) was accepted and that McDaniel was authorized to proceed with construction.

Other successful select work scope bidders, receiving notice to proceed on the 28t of August, were:

CTA	Roofing
Bear Industries	Fire Protection
John W Tieder	Electrical
Enterprise Masonry	Masonry

As referenced above, on the 28<sup>th</sup> of August 2002 Tieder was afforded a notice to proceed on the noted electrical scope, whereas NDK was directed to proceed on a second contract, for Drywall construction, in the amount of \$1,355,000 and Enterprise received their notice to proceed on the masonry and cast stone scope in the contract amount of \$3,456,000.

As part of the contract documents the owner supplied bidders with the planned performance schedule, with performance dates, presented in a critical path method format, representing a July 17<sup>th</sup>, 2002 commencement and an anticipated completion date of May 31<sup>st</sup>, 2004.

It is important to note that this report relies upon the schedule incorporated in the contract documents, and though we reflect upon dates and sequences afforded in numerous subsequent schedule updates we believe that McDaniel has the right to expect and rely upon the performance, sequencing and durations incorporated in the aforementioned schedule.

To the extent that the schedule is delayed, an extension would be expected, and to the extent that acceleration or re sequencing is directed to ameliorate the performance of other contractors, McDaniel would attempt to make all effort to mitigate said delay.

The following plate is a recapitulation of that initial schedule. In it's simplicity you will note that mechanical and plumbing construction commence upon completion of the footers and foundation walls, concurrent with the slab on grade start.

Approximately one month and two weeks later steel erection commences, once again completing in approximately one month, two weeks.

A month prior to the completion of steel erection masonry erection above grade, commences three months subsequent to the start of mechanical and plumbing construction.

Upon completion of the steel erection roofing commences and runs for less than two months, completing one month subsequent to the completion of roofing.

From experience the schedule required McDaniel to commence under slab utility work one and a half months into its two and a half month duration.

Above slab M/P risers started concurrent with the slab pours and were the initial above slab rough activity. This above slab mechanical rough sequence was tied off the start of slabs on grade (Note slab on deck was missing from the schedule).

Between January 15<sup>th</sup>, 2003 and April 9<sup>th</sup>, 2003, fully concurrent with the slab on grade construction, McDaniel experienced a period of time where above slab masonry would not progress on the floors, affording McDaniel a clear opportunity to begin the installation of remaining risers, plumbing and piping overhead laterals, and homerun/branch duct runs without obstruction from walls.

In its award winning bid McDaniel planned on this aforementioned three month period of time to stay ahead of the mason and install overhead lateral rough without obstructions. And assuming the mason was following the same sequence established in the September 2002 update McDaniel would have had a minimum of near three months of unfettered performance at the onset of every building.

This type of scheduling, albeit simple by nature, intuitively afforded McDaniel the sequences necessary to accomplish this project incorporating planned efficiencies.

As noted earlier, roofing followed the steel erection sequence and was represented by an overall project duration of less than two months. With the masonry walls complete by the 4<sup>th</sup> of May 2003, and the roof in place by the 1<sup>st</sup> of July 2003 and, finally, curtain walls and windows starting on the 4<sup>th</sup> of June 2003, McDaniel had the right to expect a weather-tight building starting in June of 2003, a full year before the planned project completion.

The start of metal studs and drywall, five months after the start of slabs, again, like above slab masonry, afforded McDaniel five months of performance, subsequent to the start of slabs on grade to perform without the impact of concurrent, or prior stud erection.

We note these sequences that comprise the schedule, as they pertain to plumbing and mechanical construction, in that each ultimately was impacted either as a result of delays, or constructive compression/acceleration attempted to ameliorate mounting delays.

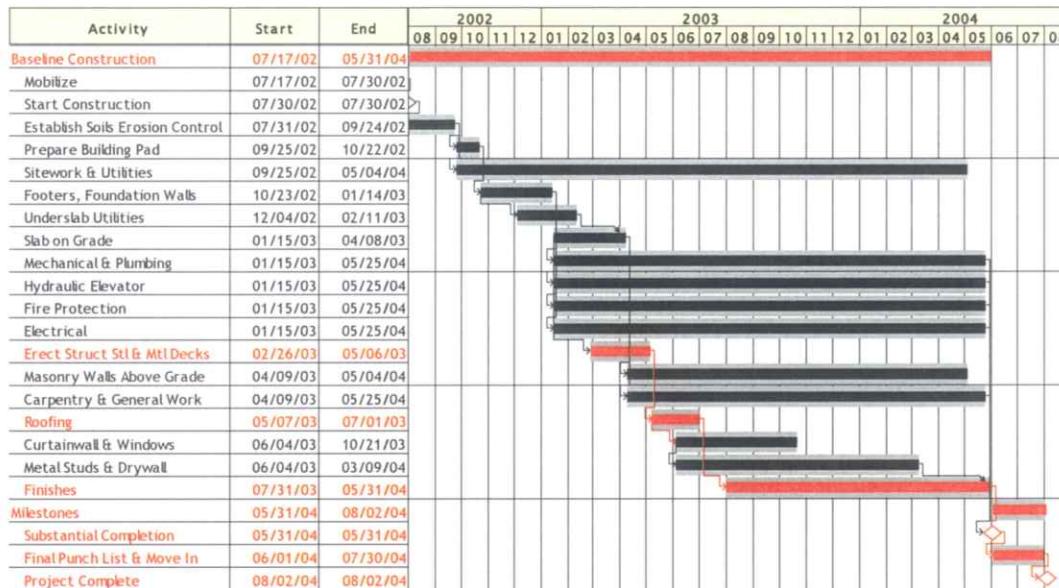
As noted in this narrative though delays amounted to substantive proportion in comparison to the project original performance duration, yet at no time was an extension afforded, by change, to the contract. Monthly schedule revisions/updates will be issued that compress sequences resulting in the aforementioned acceleration/compression, in an attempt to mitigate the impact of delays, but largely

Sussex-McDaniel P&H

Page No. 5

to no avail. Simultaneously EDiS continues to reassure the district of a timely or near timely completion despite what we will demonstrate were literally months of critical impact to the baseline schedule.

In summation, given the size of the building the schedule was aggressive, but if the sequencing and predecessor performance maintain the construction milestones, the date was readily achievable.



The first construction progress meeting references that the project sequence for construction will be A, C, D, E, F, B, whereas in subsequent meeting that sequence will change (i.e. 9/17/02 project schedule sequence of A, C, F, D, E, B).

On September 17<sup>th</sup>, 2002 the second project meeting is held, approximately two months into the twenty two months actual performance duration (7/15/02 - 5/21/04) wherein it was noted that the initial site activity "Stripping of Topsoil" will start the following day, by Croll. Other Croll activities in progress were:

- Cleaning of Route 318 ditch (Will complete as of Sept 17<sup>th</sup>, 2002)
- Stripping of topsoil (Scheduled to commence Sept 18<sup>th</sup> with Proof Rolling as of the 27<sup>th</sup>)
- Excavation of Ponds & Building Pad Prep (Will commence Sept 27<sup>th</sup>)
- Force Main Installation (To Commence Oct 22<sup>nd</sup>)
- Pre-Construction Meeting for Concrete Footers & Piers (Scheduled for November 6<sup>th</sup>)

Among the notes is one regarding the concrete commencement pre construction meeting on November 6<sup>th</sup>, whereas the schedule attached to the meeting minutes represents commencement of footers on November 1<sup>st</sup>, five days prior.

The meeting continues by noting that excavation of ponds and preparation of the building pads will commence as of the 26<sup>th</sup> of September, and were expected to complete by the 30<sup>th</sup> of October, but water has had adverse impact on progress.

The following schedule was attached to the meeting minutes and we have referenced the revised performance dates to the baseline contractually mandated performance referenced in gray. Areas where there are no gray baseline bars (i.e. Slabs on Deck), are areas of work scope not incorporated in the contractual baseline schedule document.



Other possible issues of schedule impact, noted, are the approval of change orders including, but not limited to

- Additional Fill & Grading Around the Building (Will not be processed until November 18<sup>th</sup>, 2002)
- Additional Sewer Manhole (Waiting on signature)
- Lower Sewer Mains on Site (Waiting on signature)

- Add Entrance Pipes (Change transmitted to Croll)
- Dig Test Pits (Change transmitted to Croll)
- Delete Turn Down Slabs at Exterior of Building (Under Review)

The defined baseline contract schedule would have required planned completion of the erosion controls as of September 24<sup>th</sup>, 2002, this September 17<sup>th</sup>, 2002 schedule extends the same sequence to November 8<sup>th</sup>, 2002:

Activity	Start	End	2002						
			08/04	08/11	08/18	08/25	09/01	09/08	09/15
Baseline Construction	08/05/02	07/01/04							
Mobilize	08/05/02	08/09/02							
Start Construction	08/09/02	08/09/02							
Establish Soils Erosion Control	08/09/02	11/08/02							
Install Silt Fence	08/09/02	08/09/02							
Stabilized Construction Entrance	08/26/02	09/05/02							
Clean Out Ditch	09/06/02	09/18/02							
Strip Topsoil-Ponds-Building	09/18/02	09/26/02							
Excavate Ponds & Prep Building	09/27/02	10/31/02							
Install Pond Structures	11/01/02	11/07/02							
Stabilize Ponds	11/08/02	11/08/02							
Steel Shop Drawings	09/13/02	11/07/02							

It is evident from these plates that, as of September 17<sup>th</sup> initial, critical activities of construction will be significantly waylaid from their baseline performance dates:

Activity	Start	End	2002				2003	
			08	09	10	11	12	01
Start Construction	08/09/02	08/09/02						
Establish Soils Erosion Control	08/09/02	11/08/02						
Install Silt Fence	08/09/02	08/09/02						
Stabilized Construction Entrance	08/26/02	09/05/02						
Clean Out Ditch	09/06/02	09/18/02						
Strip Topsoil-Ponds-Building	09/18/02	09/26/02						
Excavate Ponds & Prep Building	09/27/02	10/31/02						
Install Pond Structures	11/01/02	11/07/02						
Stabilize Ponds	11/08/02	11/08/02						
Steel Shop Drawings	09/13/02	11/07/02						
Footers, Foundation Walls	11/01/02	03/06/03						
Concrete A Administration	11/01/02	12/09/02						
Concrete C Classrooms	11/29/02	12/19/02						
Concrete F Gym/Cafe/Mech Room	12/02/02	02/13/03						
Concrete D Classrooms	12/13/02	01/02/03						
Concrete E Classrooms	12/27/02	01/16/03						
Concrete - B Auditorium- AG	01/31/03	03/06/03						

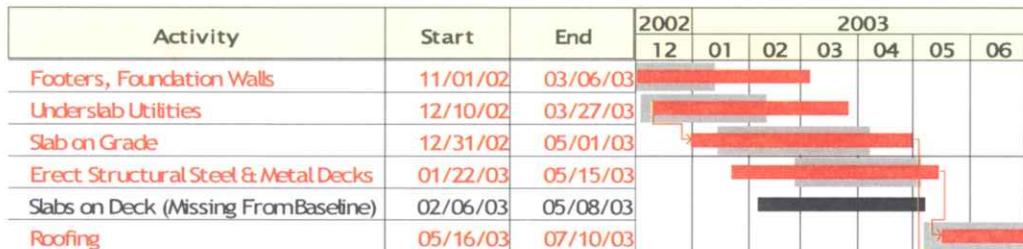
One of the initial areas that EDiS explores, in what appears to be an attempt to ameliorate early schedule logic delays, from erosion control and foundation performance, is MEP scheduling the performance of underground near fully concurrent

with concrete foundations, slabs on grade and structural steel rather than in a sequential logic, with overlaps, as originally intended.

Specifically, the baseline logic did have concurrent performance between foundations and under slab utilities, but subsequent steel and slab performance either had minimal or no concurrency.

This new schedule has slab on grade concurrent with three of the under slab three and a half months of performance, whereas the baseline had an overlap of one month, there was not structural steel overlap in the baseline whatsoever and now they are two months concurrent. Additionally deck pours have been added to the schedule, which further impede mechanical and plumbing riser placement, this time concurrent with one and a half months of the under slab overall performance duration.

The following plate demonstrates the initial schedule (Gray) and the revised schedule (Colors) to demonstrate the greater concurrency being implemented arising from delays to foundation and attempts to start slabs and steel earlier.



The minutes of the third project progress meeting, dated October 1<sup>st</sup>, 2002, note that topsoil stripping was complete on the 24<sup>th</sup> of September 2002 and proof rolling and filling of the building pad started September 25<sup>th</sup>, the following day likely using the material generated by the retention pond excavation starting the same date. Croll notes the building pad and pond work will take four to six weeks, or a possible completion in the first week of November.

During the same meeting it was noted that NDK planned commencement of footers excavation on the second week of November.

Given that the baseline schedule referenced the completion of the pad on October 22<sup>nd</sup>, and the commencement of foundations on the 23<sup>rd</sup> of October it would appear that these critical milestones, and consequently the contract are two weeks behind schedule.

The noted completion of the building pad, and commencement of foundation layout, is improved by a week (October 30<sup>th</sup>, 2002) in the fourth progress meeting dated October 15<sup>th</sup>, 2002.

Six weeks after their notice to proceed, on October 16<sup>th</sup>, 2002, McDaniel receives a contract for signature.

On October 24<sup>th</sup>, 2002 McDaniel received on set of “marked up steel drawings” from EDiS requesting that penetrations be reviewed and confirmed.

On the 29<sup>th</sup> of October 2002 EDiS writes to McDaniel noting that the will not forward pump and expansion tank submittals from manufacturers not referenced in the design documents.

The October 29<sup>th</sup>, 2002 progress and November 7<sup>th</sup> “Executive Session Meeting Minutes” notes impact to site work due to weather. As a consequence, as of the November 12<sup>th</sup> meeting, the building pad is not complete, the foundations have not commenced and layout is not likely until the 18<sup>th</sup> of November, a net delay of twenty seven calendar days. Despite this significant critical delay so early in the project, the attached project schedule of November 10<sup>th</sup>, 2002 affords no extension to the performance duration thereby compressing performance time for subsequent contractors.

The project meeting minutes, number seven, dated November 26<sup>th</sup>, 2003, more than three months beyond the July 17<sup>th</sup> notice to proceed, represents a project with

- partial soil erosion control,
- partial building pads,
- no site water controls (Storm System, Ditch Clean Out),
- no steel shop drawings for Area A.

The following, partially impacted activities result in an impacted (Structural Steel Shop Drawings Base 9/13/02 - 11/17/02, Versus Impacted 11/26/02 - 1/20/03) project substantial completion date of July 2<sup>nd</sup>, 2004, a net delay of thirty two (32) calendar days, in three months.

Activity	Start	End	2002			2003			2004		
			Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Baseline Construction	08/05/02	08/04/04									
Establish Soils Erosion Control	08/09/02	12/27/02									
Stabilized Construction Entrance	11/26/02	12/06/02									
Clean Out Ditch	12/09/02	12/19/02									
Strip Topsoil-Ponds-Building	12/19/02	12/27/02									
Steel Shop Drawings	11/26/02	01/20/03									
Fabricate Steel	01/21/03	02/17/03									
Erect Structural Steel & Metal Decks	04/04/03	06/18/03									
Roofing	06/19/03	08/13/03									
Finishes	09/03/03	07/02/04									
Milestones	07/02/04	09/03/04									
Substantial Completion	07/02/04	07/02/04									
Final Punch List & Move In	07/05/04	09/02/04									
Project Complete	09/03/04	09/03/04									

At this juncture the building pads (prepared areas for excavation) have yet to be complete, but a portion have been afforded to allow foundation excavation/construction, per NDK, during the November 26<sup>th</sup>, 2002 meeting, to start on November 21<sup>st</sup>, 2002, twenty nine days behind schedule, but three days less impact than the delay arising from the steel shop drawings.

Activity	Start	End	2002					2003	
			08	09	10	11	12	01	02
Baseline Construction	08/05/02	08/04/04							
Mobilize	08/05/02	08/09/02							
Start Construction	08/09/02	08/09/02							
Establish Soils Erosion Control	08/09/02	12/27/02							
Install Silt Fence	08/09/02	08/09/02							
Excavate Ponds & Prep Building	09/26/02	12/10/02							
Stabilized Construction Entrance	11/26/02	12/06/02							
Clean Out Ditch	12/09/02	12/19/02							
Install Pond Structures	12/11/02	12/17/02							
Stabilize Ponds	12/18/02	12/18/02							
Strip Topsoil-Ponds-Building	12/19/02	12/27/02							
Footers, Foundation Walls	11/15/02	03/24/03							
Steel Shop Drawings	11/26/02	01/20/03							

As noted in an earlier comparison, despite this rather sizable delay, now in the excavation, foundation and steel shop sequences, the EDiS schedule update, for December 2<sup>nd</sup>, 2002, does not represent any impact.

This failure to compute and outline impacts and corresponding critical extensions, arises partly from the fact that the building pad has not completed as of November 26th, yet the EDiS scheduling document reflects the activity complete on October 31<sup>st</sup>, 2002. Clearly, had the schedule been properly updated, and statused with the proper progress the impact would have been generated.

As for the concrete foundation excavation in Area A, originally scheduled to commence on October 23<sup>rd</sup>, 2002, the December 10<sup>th</sup> project meeting minutes (part 8.3.2 of the report) represent that the work commenced on the 21<sup>st</sup> of November and is scheduled to complete on the 2<sup>nd</sup> of December in the A Administration Area, whereas in report section 8.2.5 (Schedule Update) it is reported that the same effort began on December 2<sup>nd</sup> and will complete on the 18<sup>th</sup> of December. This flawed schedule reporting gives rise to the concern of whether impacts can be effectively and accurately managed by EDiS.

The January 2003 status report from EDiS to IRSD noted that the project was in fact five weeks behind schedule which they attribute to weather delays resulting in a revised contract substantial completion date of July 22<sup>nd</sup> 2004, considerably more than five weeks beyond the May 31<sup>st</sup> contractual date. Despite this representation the Buildings and Grounds Progress Meeting, dated January 6<sup>th</sup>, 2003 notes:

Construction is running approximately two weeks behind. They have already started laying the foundation and the blocks. Steel construction should begin as early as next week. Steel contractors are optimistic that they can make up some of the time.

This reporting is inaccurate in that the January 7<sup>th</sup>, 2003 EDiS project meeting number 10 unequivocally reports that steel will not start until the end February 2003.

On January 3<sup>rd</sup>, 2003 McDaniel mobilized the site, received pipe sleeving, and began placement to afford penetrations through concrete footers and block walls.

Despite a baseline completion of steel shop drawings for November 7<sup>th</sup>, 2002, the impacted overall contract completion date, generated by the actual submission of initial steel shop drawings on December 9<sup>th</sup> 2002, has now been pushed to July 15<sup>th</sup>, 2002 and no part of the steel engineering process was impacted by weather, contrary to EDiS continued reliance on this purported impact.

The submission of steel drawings for Areas C and E, were complete as of the January 10<sup>th</sup>, 2003 project meeting. Given the outstanding steel shop drawing submissions (Areas F and B) these critical drawings need to be approved in a manner as not to further waylay the contract critical path through the critical steel fabrication and erection sequence.



The January 7<sup>th</sup>, 2003 project meeting number ten notes that

- Croll continues excavation of ponds as weather allows
- Croll started installing access roads, but will focus on this in January 2003 (*Not that is is now nearing six months on site and the access roads are just commencing*).
- NDK excavation for footers and piers in Area A is ongoing
- EDiS is requiring NDK to correct piers out of tolerance
- Steel erection should start at the end of February 2003
- Enterprise started the below grade foundations in A o the 19<sup>th</sup> of December

Given that Footers, Foundation Walls, per the baseline schedule, were to have started on the 23<sup>rd</sup> of October and completed on the 14<sup>th</sup> of January, for all areas, the continued effort as of January 7<sup>th</sup>, for the A area alone, demonstrates how far NDK is behind the planned pace.

Incorporating specific sequences, generated post bid (September 18<sup>th</sup>, 2002 Schedule Update), would suggest the following foundation planned dates:

Activity	Start	End	2002			2003		
			10	11	12	01	02	03
Footers, Foundation Walls	11/15/02	03/19/03						
Concrete A Administration	11/15/02	12/20/02						
Layout Foundations	11/15/02	11/21/02						
Footers & Piers	11/21/02	12/11/02						
Block Walls Below Grade	12/12/02	12/20/02						
Concrete C Classrooms	12/12/02	01/01/03						
Footers & Piers	12/12/02	12/25/02						
Block Walls Below Grade	12/26/02	01/01/03						
Concrete F Gym/Cafe/Mech Room	12/13/02	02/26/03						
Kitchen Rough In Shop Drawings	12/13/02	01/23/03						
Footers & Piers	01/23/03	02/12/03						
Block Walls Below Grade	02/13/03	02/26/03						
Concrete D Classrooms	12/26/02	01/15/03						
Footers & Piers	12/26/02	01/08/03						
Block Walls Below Grade	01/09/03	01/15/03						
Concrete E Classrooms	01/09/03	01/29/03						
Footers & Piers	01/09/03	01/22/03						
Block Walls Below Grade	01/23/03	01/29/03						
Concrete - B Auditorium - AG	02/13/03	03/19/03						
Footers & Piers	02/13/03	03/05/03						
Block Walls Below Grade	03/06/03	03/19/03						

The March 19<sup>th</sup>, 2003 completion of the foundation sequence would equate to a seventy one day delay to foundation construction, but as noted earlier the steel shop drawings are currently generating delays that result in their driving the critical path.

As noted earlier, other issues of impact/interest, from the January 7<sup>th</sup> project meeting are:

- AP Croll started installing access roads (Access delay to date)
- Excavation of the ponds continues
- The force main installation is 25% complete
- **Installation of footers in Area A is 75% complete**
- **Foundation block walls began on December 19<sup>th</sup>, 2002**
- Excavation of footers in Area C is delayed, due to weather, until early January
- Steel shop drawings for "E" & "F" are outstanding from Murphy
- Installation of U/G Utilities in Area C will begin January 13<sup>th</sup>
- Approval of Area C steel drawings on the 15<sup>th</sup> of January

As of the 13<sup>th</sup> of January 2003 McDaniel's reporting notes that they are installing storm and sanitary underground in Area C, and that an office trailer has been delivered to the site.

On January 15<sup>th</sup>, 2003 EDiS forwards Murphy Steel the approved steel drawings for Area C.

Also on the 15th of January 203 the plumbing inspector passed the Area C Sanitary Underground mains. The following day, January 16<sup>th</sup>, McDaniel began installation of storm and sanitary mains in Area D. Despite evident delays by other contractors that have already impacted the performance period and wasted valuable installation time due to lacking progress, McDaniel continues to support the project progress in an businesslike manner.

EDiS notes on the 17<sup>th</sup> of January 2003 that they have received McDaniel's activity schedule for areas A and C. EDiS notes that they require completion of mechanical systems as of August 1<sup>st</sup>, 2003 to assist in achieving conditioned space, and consequently completion of the project.

This is of concern in that McDaniel's contract schedule did not require phased completion of any portion of the scope. By contract McDaniel's had until May 25<sup>th</sup> of 2004 to complete. The contract does not allow for alternate mandated milestones. For EDiS to suggest an operational HVAC system within six months of this notice, and nine months before the schedule completion is unreasonable, and more so given the loss of six weeks as of this date due to the impacts of others.

EDiS' request, for this interim conditioned air milestone, further compresses planned HVAC construction sequences beyond the seventy one day foundation/steel impact reported earlier.

As of January 21<sup>st</sup>, 2003 McDaniel is removing excess soil from the C Area footprint, installing stone bedding, placing piping backfilling C underground and beginning excavation of trenches in Area A for placement of underground sanitary and storm.

This is an important reference in that the failure of predecessor contractors to afford timely and properly prepared sub grade work areas is resulting in extensive additional work by McDaniel, to prepare the site, which will ultimately translate into labor overruns and early exhaustion of resources. Additionally, per McDaniel, the failure to afford a storm drainage and erosion control, complete, system, has left the project in a near quagmire state. Both conditions result in labor overruns in the under slab rough scope.

Also of importance, on this January 21<sup>st</sup>, 2003 date, is the baseline, contract schedule milestone for completion of foundations, one week prior on the 14<sup>th</sup> of January. Yet as of this date NDK continues to work areas A, D and C, and yet to start E, F and B. Without the planned footing progress precious McDaniel in slab performance time is being lost and the work, performed later in the project will require ever greater, and correspondingly less efficient, crewing if the end dates and newly introduced interim milestones are to be considered.

Even the initial schedule revision (Not agreed to by MP&H) of September 18<sup>th</sup>, 2002 noted the completion of A, C, D and E as of the 16<sup>th</sup> of January with F well underway.

Clearly the failure of NDK to complete the foundations is critically impacting the contract by a minimum of that time required, beyond January 14<sup>th</sup>, 2003 to complete the foundations. The January 2003 EDiS schedule update attached to the project meeting does not outline foundation dates for "F" or "B" buildings, but does note completion of concrete in E Classroom on April 29<sup>th</sup>, 2003, a delay of as much as three months before estimating the additional impact for F and B foundations. Noting EDiS breakout of foundations in recent schedules suggests that F and B could require yet another three months beyond the three month delayed E completion. If this is near accurate the completion of foundation could well continue through July of 2003 (4/29/03 + F&B durations of three additional months), an overall six months delay to the foundation construction.

The concern with initial delays to the project, and the impact of adverse weather, as winter approaches, is clearly delineated in the January 22<sup>nd</sup> 2003 McDaniel job report's reference to "Freeze Problems in Underground" and unequivocally states that soil is being placed on incomplete installations to avert frost. The January 27<sup>th</sup> McDaniel report notes that the project is shut down due to the cold and windy weather.

The impact of placing and removing cover due to the offset placement of foundations is an extra impact to the contract and an incurred cost to McDaniel to bury and uncover installations daily to combat cold and the lack of complete foundations. Had the foundation progressed as planned none of the conditions (poor sub grade, water intrusion, cold and frost) would have been a consideration in that the work would have been completed well before this condition.

The January 21<sup>st</sup>, 2003 project meeting note that shop drawing for buildings F & B steel were outstanding and that D & E drawings had been turned over to BIA and erection was planned for March, 2003. Oddly the attached construction schedule update notes that structural steel erection will start in A on February 13<sup>th</sup> a clear conflict in reporting.

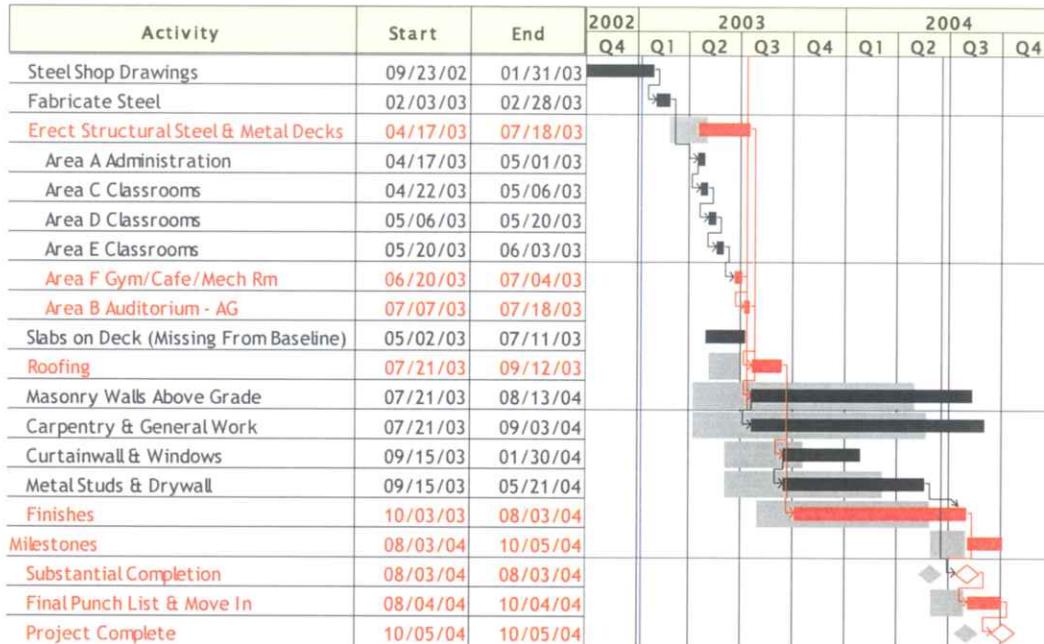
On January 24<sup>th</sup>, 2003 Baker Ingram & Associates transmits final Area E drawings as well as miscellaneous steel drawings for Area A. On the 27<sup>th</sup> and 29<sup>th</sup> of January structural steel drawings for Areas D, and E are returned by EDiS to Murphy.

The resultant impact of this issue is noted below using the original contract baseline logic and the assumption that steel will start in A on or April 17<sup>th</sup>, 2003 (Steel fab per the January 24<sup>th</sup>, 2003 meeting minutes has not commenced (Baseline schedule allows for fabrication duration and lag of thirty three calendar days prior to commencement of Building A steel erection), that there will be no further impacts from concrete

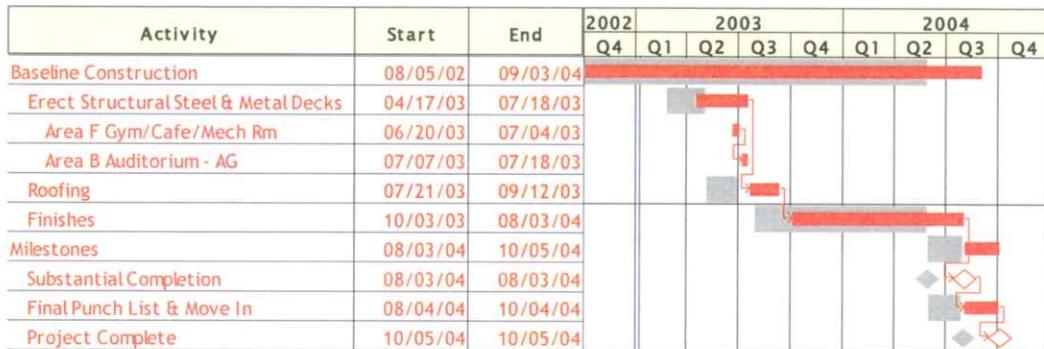
Sussex-McDaniel P&amp;H

Page No. 16

foundations and that the remaining design can be complete by January 31<sup>st</sup>, 2003 and fabrication by the 28<sup>th</sup> of April 2003:



The impact on the contractual schedule is far worse, with the steel driving the agreed baseline logic to an October 5<sup>th</sup>, 2004 completion date, more than two months behind schedule.



As of the 27<sup>th</sup> of January, 2003, as noted earlier, outside temperatures are running between 9 and 20 degrees. Had the original project schedule pace been adhered to by the foundation and excavation contractors the underground would have been two weeks from completion rather than what is transpiring:

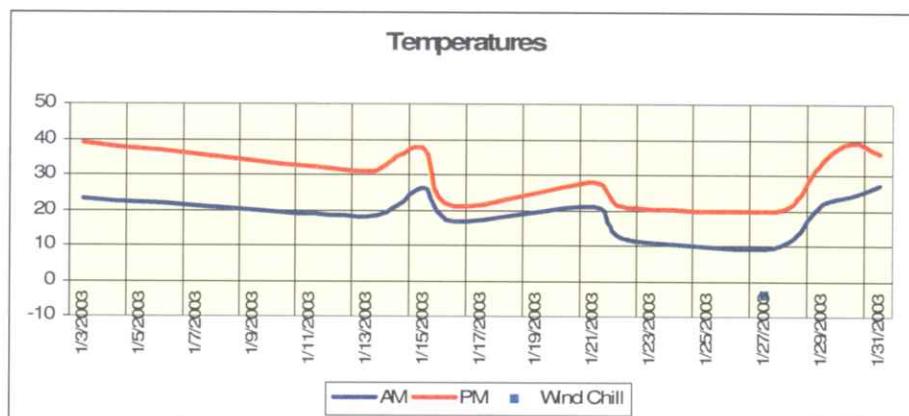
- Approximately 50% of A and less than 25% of C two weeks from planned completion

- Working piecemeal portions of Areas A and C due to sporadic and out of sequence performance by the foundation contractor
- Failure to establish a level, in tolerance building pad
- Failure to vacate the building area in a reasonable period of time

On the same January 27<sup>th</sup>, 2003 date EDiS transmits approved shop drawings for Area D. Given that the baseline schedule had a steel review and approval allowance from September 13<sup>th</sup> through November 7<sup>th</sup>, as of this date the process is some (11/7/02 Vs 1/27/03+) eighty one (81) calendar days behind schedule with no relief in the near future.

Work on Area A underground continues on the 28<sup>th</sup> through 31<sup>st</sup> of January 2003 in temperatures ranging between 9 and 36 degrees, little more than a week from when McDaniel should have vacated the open site (2/11/03).

The following is a brief recapitulation of Winter temps experience at the onset of January weather at the site.



At the conclusion of this month (1/31/03) McDaniel continues to progress A, as previously noted, and D underground (Storm & Sanitary).

Work continues on the underground in A area between February 3<sup>rd</sup> and 14<sup>th</sup> amidst inclement weather more than two weeks beyond the scheduled completion of all underground.

The February McDaniel daily report comments note:

- 2/4/03 - No work bad weather
- 2/5/03 - No work job wet and muddy

Sussex-McDaniel P&amp;H

Page No. 18

So that there is no confusion that failure to afford an accessible site and timely foundation installation is why the critical project pace is lagging and the February 14<sup>th</sup> 2003 McDaniel daily log clearly calls out the basis for impact to underground installation to date:

Merlin VanderMark (NDK General Contractor) needs to complete at least one area (Areas A-C)

The February 5<sup>th</sup> superintendents (School Superintendent) meeting notes that the project is four weeks behind schedule, but in much better shape than the Indian River School with a projected start of steel within the next two weeks. Given that the February 4<sup>th</sup>, 2003 project meeting number 12 noted that foundation walls had only just completed on the A building, and noting that overall time for foundations and foundation walls is under three months with a planned completion of January 14<sup>th</sup>, 2003, some three weeks prior, it would appear that A Building may be four weeks behind, but the remaining buildings will vastly eclipse this A Building lapse.

Clearly the superintendent was not being kept adequately informed of the level of delays being experienced as of this date in that in that the steel, in the forthcoming March monthly EDiS Owner report will slip to April 21<sup>st</sup>, and in the April monthly reporting will slip to a planned start of May 12th. These seriously flawed interim projections, aside from requiring contractor's to maintain inefficient crewing, demonstrate the lack of control and/or knowledge the construction manager has regarding the progress of this project.

On the 21<sup>st</sup> of March 2003 foundation and building pad work had progressed to such a level that McDaniel was able to complete their first underground, including test, Sanitary Waste & Vent Piping in Area D First Floor.

The EDiS Monthly report notes:

March has been a more productive month. The weather is improving and the crews are able to move the site with much less effort.

Area A is being prepared for installation of structural steel which should start April 21<sup>st</sup>, 2003.

Areas E, D and C are under construction and will be prepared for slab on grade installation by the end of April followed by erection of the steel structure.

Area F will proceed with the installation of concrete foundations and below grade masonry followed by the remaining section of Area B.

Mechanical underground work is nearly complete in areas, E, D & C. The plumbing contractor will move to Area F this week.

During the impacted, and largely unforeseen winter performance period McDaniel incurred \$50,799 in labor (October 2002 - March 2003), whereas his budget reflected an estimate of 648 hours, or \$20,736 to perform the same work. Therefore, as of March 30<sup>th</sup>, with underground still incomplete due to delay in foundations, foundation walls and sub grade preparation, McDaniel has overrun their bid estimate by (50,799 - 20736) more than \$30,000 with E, D and C ongoing and F & B yet to start. Clearly McDaniel exceeded under slab utility estimates several time over coping with poor access, unforeseen weather impact and general project delays.

The EDiS Monthly report continues by noting:

Currently the overall project is (8) eight weeks behind schedule.

Predicated on the most critical path (either concrete or steel) the schedule as originally bid will reflect impacted progress if the information forwarded by EDiS is accurate.

Sadly the EDiS monthly project report, to the district, for March of 2003, appears inaccurate in that the schedule attachment represents that footers and piers for Areas A, C and D were completed in early December, January and February, respectively. Yet EDiS's project meeting minutes of March 4<sup>th</sup>, 2003 note that excavation for footings and piers in areas A, C and D are ongoing and that EDiS had requested that NDK complete the piers in C to afford the mason work.

The March 18<sup>th</sup>, 2003 EDiS progress meeting notes that:

- NDK has not corrected the outstanding problems with the piers in areas A, C and D
- It was noted that many, if not all the piers installed, are installed incorrectly, not per plans and specifications
- Incorrect elevations at the footings is slowing down masonry construction

Clearly NDK was nowhere near completing the footings and piers as of March 18<sup>th</sup>, 2003 in Areas A, C and D, no less in December, January and February as erroneously reported by EDiS to IRSD I March of 2003. From review it was be ill advised to base purported schedule impact on the monthly schedule updates referenced performance, but, instead, preferably on the project meeting minutes.

It appears that NDK's performance became disturbing enough that on the 27<sup>th</sup> of March, 2003 EDiS, IRSD, BMG and NDK met to discuss NDK's performance. It had been the IRSD and EDiS belief that NDK's bonding representative would be in attendance, but they were not present. What was cited by the owner, and EDiS, regarding performance of this critical contractor over the past five months, was:

- Arbitrarily oversize piers and foundations

- Placing anchor bolts and accessories with proper templates and forms
- Inaccurate elevations on footers and foundations
- Insufficient notification of project alterations
- Delaying of construction due to performance by contracts including within NDK's scope of work, i.e. survey/layout
- Not responsive to written communications from Construction Manager pertaining to contract obligations
- Insufficient quality control

Of importance, looking forward is EDiS' suspension of NDK work in area F and B (March 27<sup>th</sup>, 2003 Mtg. Minutes Item 7) until correction of A, C and D areas were corrected further impacting project critical progress.

Clearly NDK's actions had not only delayed the project, and afforded McDaniel, among others, far more difficult working conditions, but now will require extensive reconstruction while additionally suspending any possible immediate progress in areas F and B.

That the owner was ready to terminate NDK, who truly had waylaid the contract that now was, per EDiS eight weeks behind schedule, and three months per our March analysis, is a stark contrast to their actual termination of McDaniel whose only failing was to continue to attempt to achieve progress working under the conditions of active interference and acceleration fostered by EDiS's and IRSD management.

That no foundation structure is available for backfill as of this March 27<sup>th</sup>, 2003 date, and noting the planned contractual completion for this critical work sequence of January 14<sup>th</sup>, 2003, the immediate incurred delay is currently two months with only a portion of the foundation work progressed, and much of that erroneously installed.

Taking into account the corrections requested and the remaining time to complete A through E and then mount F and B (Three months per initial foundation break out by EDiS) it would appear the foundation work is in excess of four months behind schedule.

As of April 1<sup>st</sup>, 2003, eight months into the original project performance duration (8/28/02 - 5/31/04) of 642 calendar days, or approximately 37% of the contract duration exhausted the project meeting number 15 notes:

- 15.2.3 Footing inspections are ongoing (footings were to complete on February 20, 2003, forty days prior).
- No schedule update.
- Ponds are currently being pumped and prepped for excavation
- Revisions to anchor bolts Murphy to provide a proposal
- Croll is 95% compete on force main. Work should be completed 4/14/03.
- Croll is working on entrance road construction.